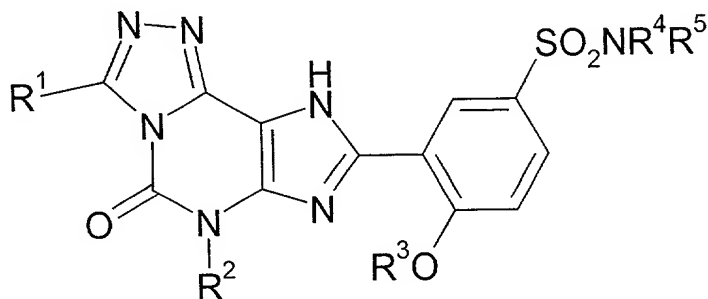


## ABSTRACT

### 8-PHENYL-6,9-DIHYDRO-[1,2,4]TRIAZOLO[3,4-*i*]PURIN-5-ONE DERIVATIVES

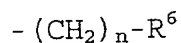
8-phenyl-6,9-dihydro-[1,2,4]triazolo[3,4-*i*]purin-5-one  
derivatives of formula (I):



(I)

wherein:

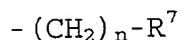
R<sup>1</sup>, R<sup>2</sup> and R<sup>3</sup> each independently represent: hydrogen; an alkyl group which is unsubstituted or substituted by a hydroxy, alkoxy, alkylthio, amino, mono- or di-alkylamino, hydroxycarbonyl, alkoxycarbonyl, acylamino, carbamoyl or alkylcarbamoyl group; or a group of formula



wherein n is an integer from 0 to 4 and R<sup>6</sup> represents: a cycloalkyl group; a phenyl group which may be unsubstituted or substituted by one or more halogen atoms or alkyl, hydroxy, alkylenedioxy, alkoxy, amino, mono- or di-alkylamino, nitro, cyano or trifluoromethyl groups; or a 3 to 7-membered ring comprising from 1 to 4 heteroatoms selected from nitrogen, oxygen and sulphur, which ring may be unsubstituted or substituted by one or more halogen atoms or hydroxy, phenyl, alkoxycarbonyl, amino, mono-alkylamino, di-alkylamino or hydroxycarbonyl groups or one or more alkyl

groups which may in turn be unsubstituted or substituted by one or more halogen atoms or hydroxy, alkoxy, hydroxyalkoxy, phenyl, alkoxycarbonyl, amino, mono- or di-alkylamino or hydroxycarbonyl groups;

- 5 either R<sup>4</sup> and R<sup>5</sup> together with the nitrogen atom to which they are attached form a 3 to 7-membered ring comprising a total of from 1 to 4 heteroatoms selected from nitrogen, oxygen and sulphur, which ring may be unsubstituted or substituted by one or more halogen atoms or hydroxy, oxoalkyl, carbamoyl, hydroxycarbonyl, alkoxycarbonyl, trifluoroacetyl, amino, mono- or di-alkylamino groups or an alkylene group, or one or more alkyl, alkenyl or alkynyl groups which may in turn be unsubstituted or substituted by one or more halogen atoms or hydroxy, alkoxy, hydroxyalkoxy, amino or mono- or di-alkylamino groups, or
- 10 R<sup>4</sup> and R<sup>5</sup> independently represent hydrogen, an amidino group or an alkyl, alkenyl or alkynyl group which may be unsubstituted or substituted by one or more halogen atoms or hydroxy, alkoxy, alkylthio, amino, mono- or di-alkylamino groups, or
- 15 R<sup>4</sup> represents hydrogen or an alkyl group and R<sup>5</sup> represents a group of formula
- 20



- 25 wherein n is an integer from 0 to 4 and R<sup>7</sup> represents: a cycloalkyl group which may be unsubstituted or substituted by one or more halogen atoms or alkyl, hydroxy, alkylenedioxy, alkoxy, amino, mono- or di-alkylamino, alkylamido, nitro, cyano or trifluoromethyl groups; a phenyl group which may be unsubstituted or substituted by one or more halogen atoms or alkyl, hydroxy, alkylenedioxy, alkoxy, amino, mono- or di-alkylamino, nitro, cyano or trifluoromethyl groups; or a 3 to 7-membered ring comprising
- 30 from 1 to 4 heteroatoms selected from nitrogen, oxygen and sulphur, which ring may be unsubstituted or substituted by one or more halogen atoms or hydroxy, alkoxy, phenyl,
- 35

alkoxycarbonyl, amino, mono-alkylamino, di-alkylamino or hydroxycarbonyl groups or one or more alkyl groups which may be unsubstituted or substituted by one or more halogen atoms or hydroxy, alkoxy, hydroxyalkoxy, phenyl, alkoxycarbonyl, amino, mono- or di-alkylamino or hydroxycarbonyl groups; or a pharmaceutically acceptable salt thereof; processes for their preparation, pharmaceutical compositions containing them and their use as PDE 5 inhibitors.